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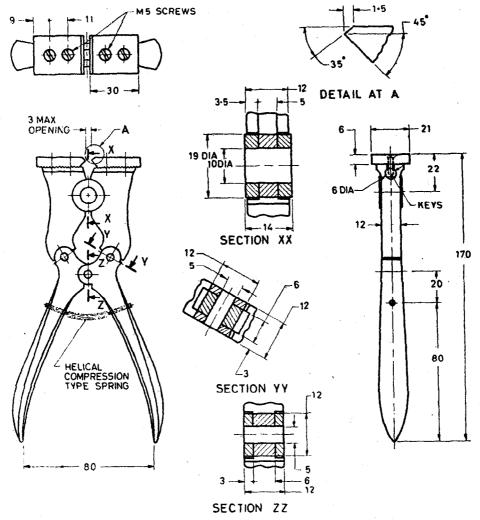




## Indian 'Standard

## SPECIFICATION FOR FORCEPS, WIRE CUTTING, COMPOUND ACTION, ORTHOPAEDIC

- 1. Scope Covers dimensions and requirements for compound action wire cutting forceps of the following types:
  - a) Replaceable dies type, and
  - b) Plier type having side cutters.
- 2. Materials
- 2.1 Holding and Cutting Dies Steel conforming to Designation T118 of Schedule VI of IS: 1570-1961\*.
- 2.2 Arms Mild steel.
- 2.3 Rivets Steel conforming to IS: 1148-1964† having minimum of 0.45 carbon.
- 2.4 Spring Spring steel conforming to Grade 2 of Section 2 of IS: 4454-1969‡.
- 3. Shapes and Dimensions



All dimensions in millimetres.

FIG. I WIRE CUTTING FORCEPS, COMPOUND ACTION, REPLACEABLE DIES TYPE

Adopted 9 April 1970

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Price Rs 5.00

Gr1

<sup>\*</sup>Schedules for wrought steels for general engineering purposes. †Specification for rivet bars for structural purposes (revised). (Since revised).

<sup>#</sup>Specification for steel wires for cold formed springs. (Since revised and split into various parts).

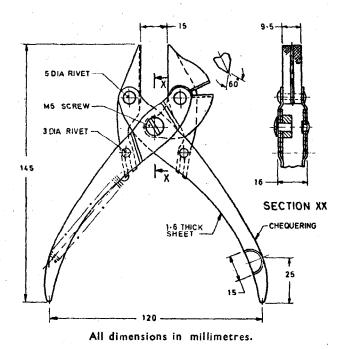


FIG. 2 WIRE CUTTING FORCEPS, COMPOUND ACTION,
PLIER TYPE WITH SIDE CUTTERS

## 4. Requirements

- 4.1 Workmanship The forceps shall be free from pits, burrs, cracks, scale, seams, fins and other defects. They shall be finished smooth all over and sharp edges, other than the cutting edges shall be rounded off. The forceps shall work freely without any undue play or stiffness at the joints. The cutting edges of the forceps shall be in perfect alignment with each other and shall meet completely and evenly in closed position. The cutting edges shall be ground. The replaceable dies shall be adjustable and the dies and corresponding jaws shall grip with each other properly. In case of plier type forceps having side cutters the holding jaws shall grip the wire firmly and accurately.
- 4.2 Finish The forceps shall be plated chromium over nickel in accordance with Service Grade No. 3 of IS: 1068-1968\*.
- 4.3 Heat Treatment The cutting and holding dies shall be hardened and tempered to 700 to 750 HV.
- 4.4 Cutting of Wire—A piece of stainless steel hard drawn wire 1.5 mm in diameter shall be cut three times at the same point of the cutting edge. The cutting edge shall not show any sign of indentation or damage after the completion of the test.
- 4.5 Holding Power of Arms The jaws of the cutting forceps shall meet together when a load of I kg is applied to the arms at their ends by a compression type spring balance.
- 5. Marking Shall be clearly and legibly stamped with manufacturer's name, and recognized trademark.
- 5.1 ISI Certification Mark Details available from the Indian Standards Institution,
- 6. Packing—The forceps shall be packed as agreed to between the purchaser and the supplier, however it is recommended that each forceps be wrapped in craft or wax paper and suitably packed in cardboard cartons bearing the manufacturer's name, initials or trade-mark.

<sup>\*</sup>Specification for electroplated coatings of nickel and chromium on iron and steel (first revision).